

Identity during a Crisis: COVID-19 and Ethnic Divisions in the United States

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ONLINE APPENDIX

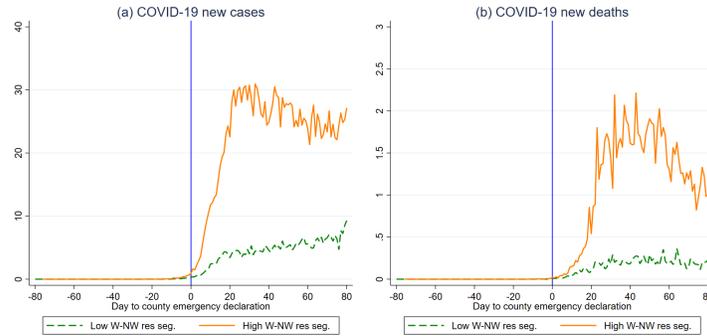


FIGURE A1. COVID-19 AND COUNTY-LEVEL EMERGENCY DECLARATION BY LEVEL OF WHITE/NON-WHITE RESIDENTIAL SEGREGATION

Note: Figure A1 plots the average number of new daily COVID-19 cases (Panel a) and deaths (Panel b) in U.S. counties relative to the date of their county-level State of Emergency declarations (denoted by the blue line), disaggregated by counties with below-median (shown in green) and above-median (shown in orange) levels of White/non-White residential segregation.

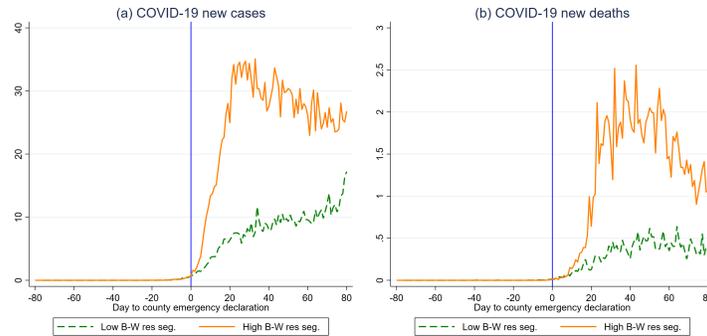


FIGURE A2. COVID-19 AND COUNTY-LEVEL EMERGENCY DECLARATION BY LEVEL OF BLACK/WHITE RESIDENTIAL SEGREGATION

Note: Figure A2 plots the average number of new daily COVID-19 cases (Panel a) and deaths (Panel b) in U.S. counties relative to the date of their county-level State of Emergency declarations (denoted by the blue line), disaggregated by counties with below-median (shown in green) and above-median (shown in orange) levels of Black/White residential segregation.

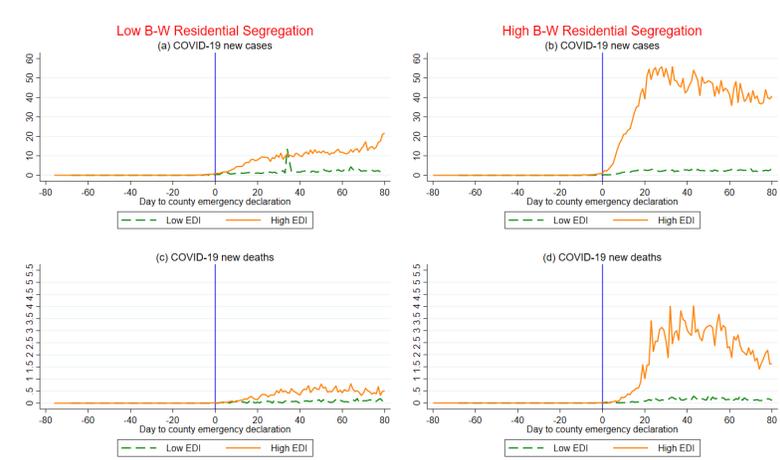


FIGURE A3. COVID-19 AND COUNTY-LEVEL EMERGENCY DECLARATION BY LEVEL OF ETHNIC DIVERSITY AND LEVEL OF BLACK/WHITE RESIDENTIAL SEGREGATION

Note: Figure A3 plots the average number of new daily COVID-19 cases and deaths in U.S. counties relative to the date of their county-level State of Emergency declarations (denoted by the blue line), shown in separate graphs for counties with below-median (Panels a and c) and above-median (Panels b and d) levels of Black/White racial residential segregation. The average number of new daily cases (Panels a and b) and deaths (Panels c and d) attributed to COVID-19 is shown for counties with above-median values of ethnic diversity (shown in orange) and below-median values of ethnic diversity (shown in green), where ethnic diversity is defined for each county as the value of the Herfindahl-Hirschman Index.

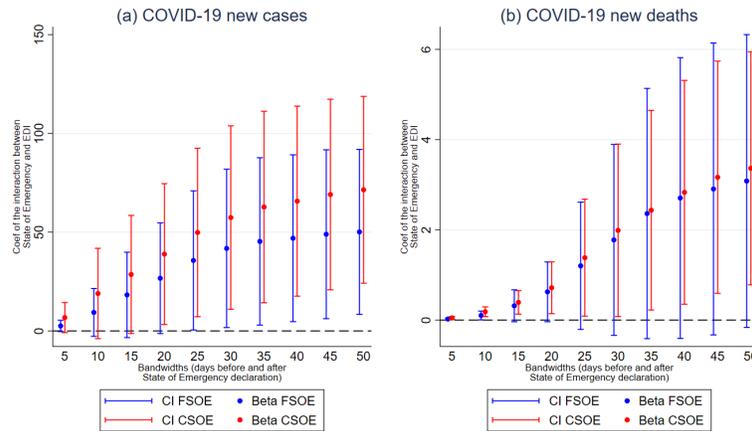


FIGURE A4. DYNAMIC OF THE EFFECT OF THE INTERACTION BETWEEN EMERGENCY DECLARATIONS AND EDI ON COVID-19 OUTCOMES

Note: Figure A4 summarizes, for different bin sizes around the policy dates, the regression coefficients and 95% confidence intervals of the interaction term between the Federal State of Emergency Declaration and EDI (denoted by FSOE, shown in blue), and the regression coefficient of the interaction term between the county-level State of Emergency Declaration and EDI (denoted by CSOE, shown in red). For example, 5 on the x-axis indicates a bin size of five days before and after the state of emergency declaration. Panel (a) shows estimation results for the outcome of new daily COVID-19 cases. Panel (b) shows estimation results for the outcome of new daily COVID-19 deaths. All specifications include county and day fixed effects. Standard errors are clustered at the state level.

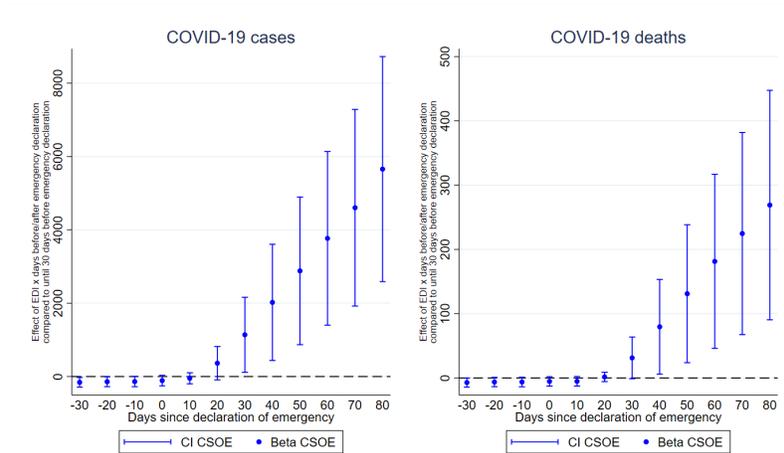


FIGURE A5. EVENT-STUDY ESTIMATES OF THE EFFECT OF THE INTERACTION BETWEEN COUNTY-LEVEL EMERGENCY DECLARATION AND EDI ON COVID-19 OUTCOMES

Note: Figure A5 summarizes, for different bin sizes, the event-study coefficients and 95% confidence intervals of the effect of interaction between the county-level State of Emergency declaration and EDI on COVID-19 outcomes. The vertical axis shows event-study estimates. The period from January 22, 2020 to until 31 days before the State of Emergency declaration is the reference period. The model includes dummies for each period of 10 days before and after the State of Emergency declaration. 95% confidence intervals around the estimated regression coefficients are plotted. All specifications include county and day fixed effects. Standard errors are clustered at the state level.

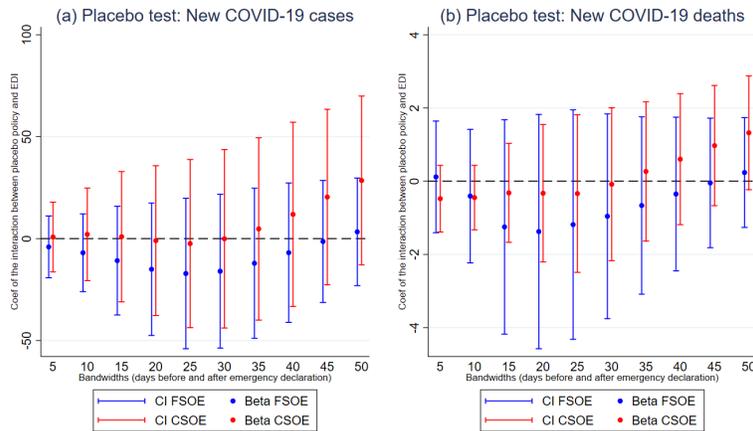


FIGURE A6. PLACEBO TEST: DYNAMIC OF THE EFFECT OF THE INTERACTION BETWEEN FICTITIOUS EMERGENCY DECLARATIONS AND EDI ON COVID-19 OUTCOMES

Note: Figure A6 summarizes, for different bin sizes around the fictitious policy date, the regression coefficients and 95% confidence intervals of the interaction term between a placebo policy 45 days after the Federal State of Emergency Declaration and EDI (results are shown in blue and denoted by FSOE), and the regression coefficients of the interaction term between the a placebo policy 45 days after the county-level State of Emergency Declaration and EDI (results are shown in red and denoted by CSOE). For example, 5 on the x-axis indicates a bin size of five days before and after the placebo policy. Panel (a) shows coefficients for the outcome of new daily COVID-19 cases. Panel (b) shows coefficients for the outcome of new daily COVID-19 deaths. All specifications include county and day fixed effects. Standard errors are clustered at the state level.

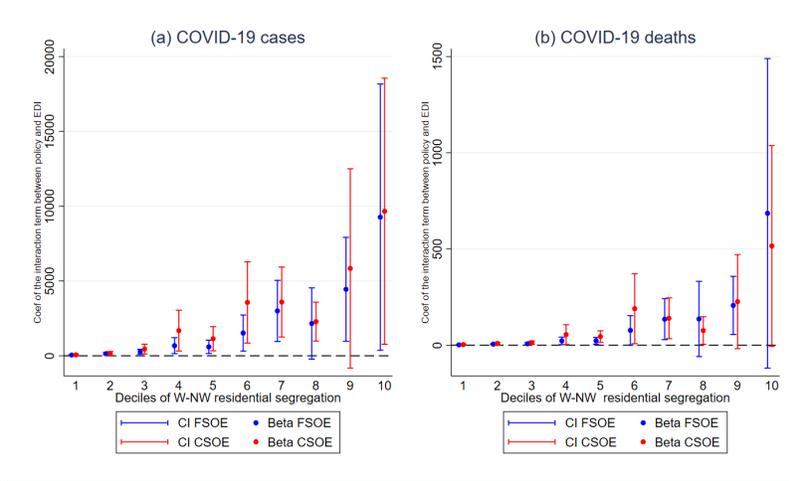


FIGURE A7. EFFECT OF THE INTERACTION BETWEEN EMERGENCY DECLARATIONS AND EDI ON COVID-19 OUTCOMES BY DECILES OF WHITE/NON-WHITE RESIDENTIAL SEGREGATION

Note: Figure A7 summarizes the regression coefficients and 95% confidence intervals of the interaction term between the Federal State of Emergency Declaration and EDI (denoted by FSOE, shown in blue), and the regression coefficient of the interaction term between the county-level State of Emergency Declaration and EDI (denoted by CSOE, shown in red). Each regression is estimated separately for each decile of White/non-White residential segregation. Panel (a) shows estimates for the outcome of new daily COVID-19 cases. Panel (b) shows estimates for the outcome of new daily COVID-19 deaths. All specifications include county and day fixed effects. Standard errors are clustered at the state level.

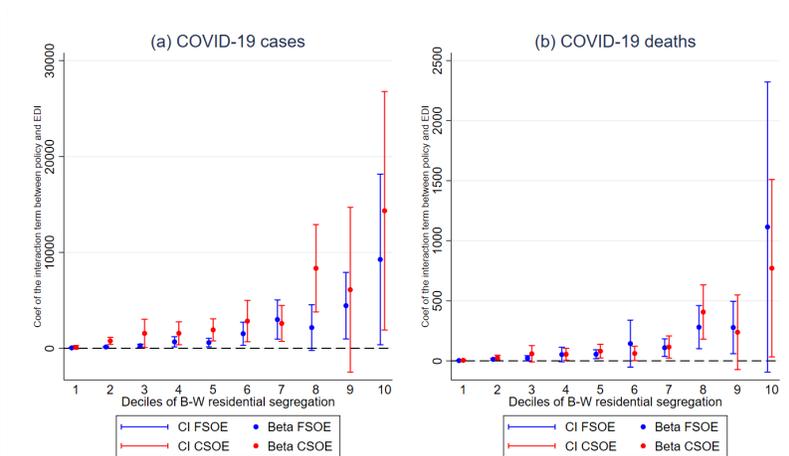


FIGURE A8. EFFECT OF THE INTERACTION BETWEEN EMERGENCY DECLARATIONS AND EDI ON COVID-19 OUTCOMES BY DECILES OF BLACK/WHITE RESIDENTIAL SEGREGATION

Note: Figure A8 summarizes the regression coefficients and 95% confidence intervals of the interaction term between the Federal State of Emergency Declaration and EDI (denoted by FSOE, shown in blue), and the regression coefficient of the interaction term between the county-level State of Emergency Declaration and EDI (denoted by CSOE, shown in red). Each regression is estimated separately for each decile of Black/White residential segregation. Panel (a) shows estimates for the outcome of new daily COVID-19 cases. Panel (b) shows estimates for the outcome of new daily COVID-19 deaths. All specifications include county and day fixed effects. Standard errors are clustered at the state level.

TABLE A1—DESCRIPTIVE STATISTICS OF THE MAIN VARIABLES OF INTEREST

	N	Mean	Std. de.	Min.	Max.
Total cases*	3,143	610.29	3307.51	0	82,427
Total death*	3,143	34.71	247.11	0	6,841
Duration of the pandemic	3,143	67.80	22.34	0	231
Ethnic Diversity Index	3,142	0.31	0.18	0	0.83
White/non-White Residential segregation index	2,791	30.81	13.19	0	90
Black/White Residential segregation index	2,069	45.18	16.42	0	89
County with SOE (in %)	3,143	0.28	0.45	0	1
County with safer-at-home order (in %)	3,143	0.05	0.21	0	1
County with business closure (in %)	3,143	0.01	0.09	0	1
Population density	3,117	431.96	2193.84	0	79761.45
Percentage of male	3,142	50.09	2.38	41	79.00
Median age	3,142	41.29	5.41	22	67.00
Poverty rate	3,141	15.60	6.48	2	55.10
Educational attainment	3,142	0.86	0.06	0	0.99
Urban population (in %)	3,140	0.41	0.32	0	1.00
Foreign-born (in %)	3,142	4.72	5.71	0	53.25
Adults with fair or poor health (in %)	3,142	17.94	4.74	8	40.99
Smokers (in %)	3,142	17.47	3.61	6	41.49
Adults with obesity (in %)	3,142	32.86	5.45	12	57.70
Adults with diabetes (in %)	3,142	12.12	4.06	2	34.10

Relevant summary statistics are shown in this table. Sociodemographic variables are calculated from the 2018 American Community Survey. COVID-19 outcomes are compiled from USAFacts. County-level policy variables are retrieved from the National Association of Counties. *Average of the cumulative number of COVID-19 cases and deaths as of June 07, 2020. According to the National Association of Counties, safer-at-home orders direct individuals to remain at home while not engaged in "essential" activities such as visiting the doctor and shopping for food or medical supplies. Business closure policies stop the in-person operations of "nonessential" businesses, with the definition of "nonessential" businesses varying by county.

TABLE A2—EMERGENCY DECLARATIONS, ETHNIC DIVERSITY, AND COVID-19 OUTCOMES IN LEVEL

	Low W-NW res. seg.		High W-NW res. seg.	
	(1)	(2)	(3)	(4)
Government policy: National Emergency Declaration				
Panel A: Covid-19 cases				
Post Federal emergency declaration	73.72*** (10.07)		574.70*** (177.44)	
EDI	208.63*** (50.81)		2646.75** (991.55)	
Post Federal emergency declaration × EDI		330.85*** (80.59)		4197.18** (1573.13)
Observations	195,408	195,408	189,750	189,750
Panel B: Covid-19 deaths				
Post Federal emergency declaration	2.77*** (0.39)		33.16** (12.43)	
EDI	7.07*** (1.76)		160.74** (75.84)	
Post Federal emergency declaration × EDI		11.22*** (2.80)		254.91** (120.33)
Observations	195,408	195,408	189,750	189,750
Government policy: County Emergency Declaration				
Panel C: Covid-19 cases				
Post county emergency	163.79*** (24.66)	-388.36*** (93.14)	936.31*** (261.40)	-3090.41*** (880.56)
EDI	475.64*** (126.55)		3365.93*** (988.95)	
Post county emergency × EDI		778.09*** (213.16)		5335.91*** (1615.59)
Observations	54,510	54,510	57,546	57,546
Panel D: Covid-19 deaths				
Post county emergency	6.20*** (0.89)	-13.85*** (3.08)	44.93*** (13.28)	-146.41*** (44.88)
EDI	16.86*** (4.20)		155.99*** (52.66)	
Post county emergency × EDI		27.67*** (7.06)		247.88*** (85.99)
Observations	54,510	54,510	57,546	57,546
State FE				
County FE		✓		✓
Day FE		✓		✓

Each column of each panel reports coefficients from a separate regression. The dependent variable in each regression is denoted by the corresponding panel title. High and low W-NW res. seg. refer to counties with above- and below-median values of the White/non-White racial residential segregation index, respectively. Standard errors are clustered at the state level. ***p < .001, **p < .01, *p < .05.

TABLE A3—EMERGENCY DECLARATIONS, WHITE/NON-WHITE RACIAL SEGREGATION, AND COVID-19 OUTCOMES

	COVID-19 outcomes in rates			COVID-19 outcomes in level		
	(1)	(2)	(3)	(4)	(5)	(6)
Government policy: National Emergency Declaration						
Panel A: Covid-19 cases						
Post Federal emergency declaration	152.10*** (15.49)			320.53*** (92.21)		
High W-NW res. seg. index	47.02*** (13.19)	-22.17* (11.76)		315.91*** (110.44)	-226.98** (100.09)	
Post Federal emergency declaration × High W-NW res. seg. index		75.25*** (21.04)	74.58*** (20.92)		506.07*** (176.86)	500.98*** (175.19)
Observations	385,158	380,328	385,158	385,158	380,328	385,158
Panel B: Covid-19 deaths						
Post Federal emergency declaration	6.26*** (1.01)			17.74*** (6.40)		
High W-NW res. seg. index	2.59*** (0.82)	-1.78** (0.74)		19.16** (7.78)	-14.89** (7.40)	
Post Federal emergency declaration × High W-NW res. seg. index		4.14*** (1.32)	4.11*** (1.31)		30.69** (12.47)	30.38** (12.34)
Observations	385,158	380,328	385,158	385,158	380,328	385,158
Government policy: County Emergency Declaration						
Panel C: Covid-19 cases						
Post county emergency	164.15*** (23.42)	-22.83 (35.35)	-17.63 (38.10)	570.81*** (146.91)	-848.46*** (269.10)	-977.93*** (269.36)
High W-NW res. seg. index	40.45** (20.04)	-13.62 (18.91)		472.01*** (157.21)	-301.18** (148.10)	
Post county emergency × High W-NW res. seg. index		64.60* (33.12)	66.43* (34.71)		762.34*** (251.36)	731.34*** (247.67)
Observations	112,056	111,090	112,056	112,056	111,090	112,056
Panel D: Covid-19 deaths						
Post county emergency	6.69*** (1.29)	-1.82 (2.28)	-1.81 (2.32)	26.56*** (7.48)	-41.81*** (14.20)	-47.88*** (13.88)
High W-NW res. seg. index	1.70 (1.22)	-1.19 (0.75)		23.61*** (8.05)	-15.65* (7.97)	
Post county emergency × High W-NW res. seg. index		2.68 (2.03)	2.52 (2.12)		38.05*** (12.77)	36.63*** (12.73)
Observations	112,056	111,090	112,056	112,056	111,090	112,056
State FE		✓			✓	
County FE			✓			✓
Day FE		✓	✓		✓	✓
Controls		✓			✓	

Each column of each panel reports coefficients from a separate regression. The dependent variable in each regression is denoted by the corresponding panel title. *Controls* include county-level demographic characteristics (i.e. county area, percentage of males, average age, poverty, education, urban area, the percentage of immigrants, and share of Trump voters) and county-level health characteristics (i.e. the percentage of adults with obesity, in “poor health”, with diabetes, and who smoke). Standard errors are clustered at the state level. ***p < .001, ** p < .01, * p < .05.

TABLE A4—EFFECT OF THE INTERACTION BETWEEN EMERGENCY DECLARATIONS AND EDI ON COVID-19 OUTCOMES BY DECILES OF WHITE/NON-WHITE RACIAL SEGREGATION

	FSOE		CSOE		FSOE		CSOE	
	Cases in rates (1)	Deaths in rates (2)	Cases in rates (3)	Deaths in rates (4)	Cases in level (5)	Deaths in level (6)	Cases in level (7)	Deaths in level (8)
Decile 1: Policy × EDI	339.96*** (94.22)	10.45*** (3.21)	460.25* (235.13)	16.20* (8.65)	49.09*** (13.44)	1.59*** (0.45)	60.51** (26.75)	2.90* (1.45)
Observations	42,366	42,366	8,142	8,142	42,366	42,366	8,142	8,142
Decile 2: Policy × EDI	292.48*** (85.62)	11.09*** (3.07)	156.19* (83.77)	8.91* (4.88)	140.71*** (32.66)	5.11*** (1.11)	159.58** (62.85)	8.50** (3.19)
Observations	40,434	40,434	12,558	12,558	40,434	40,434	12,558	12,558
Decile 3: Policy × EDI	366.18** (138.55)	11.78* (6.24)	323.78 (204.80)	17.91 (13.64)	267.30*** (80.20)	7.54*** (2.54)	452.09*** (158.28)	12.86*** (4.38)
Observations	36,432	36,432	10,902	10,902	36,432	36,432	10,902	10,902
Decile 4: Policy × EDI	288.63*** (103.52)	8.23* (4.20)	377.91** (159.57)	10.76 (8.69)	675.89** (258.77)	22.30** (9.52)	1683.36** (661.71)	55.12** (24.98)
Observations	39,054	39,054	11,730	11,730	39,054	39,054	11,730	11,730
Decile 5: Policy × EDI	306.21*** (102.79)	10.72** (4.25)	207.89 (124.48)	11.11 (7.25)	596.29*** (215.97)	22.68** (8.41)	1140.79*** (391.07)	44.76*** (14.55)
Observations	37,122	37,122	11,178	11,178	37,122	37,122	11,178	11,178
Decile 6: Policy × EDI	331.95*** (83.88)	14.87*** (5.08)	386.50** (154.26)	17.77 (10.88)	1521.93** (584.73)	76.74** (37.16)	3566.49** (1318.97)	189.73** (88.36)
Observations	37,398	37,398	11,178	11,178	37,398	37,398	11,178	11,178
Decile 7: Policy × EDI	253.56* (136.70)	14.36* (8.04)	-107.21 (189.64)	3.18 (5.26)	2999.20*** (991.99)	135.15** (51.71)	3592.47*** (1134.76)	139.75** (51.43)
Observations	41,538	41,538	14,904	14,904	41,538	41,538	14,904	14,904
Decile 8: Policy × EDI	461.99*** (140.44)	23.94** (11.38)	322.43* (181.23)	10.50 (11.21)	2160.58* (1155.57)	135.99 (94.97)	2281.14*** (630.82)	76.09** (34.91)
Observations	35,052	35,052	7,038	7,038	35,052	35,052	7,038	7,038
Decile 9: Policy × EDI	937.74*** (227.43)	39.89*** (11.27)	672.04** (284.93)	25.96** (10.84)	4444.64** (1684.95)	206.53*** (73.39)	5840.13* (3234.35)	226.16* (118.71)
Observations	39,882	39,882	12,972	12,972	39,882	39,882	12,972	12,972
Decile 10: Policy × EDI	775.09*** (178.29)	45.74** (17.11)	737.50*** (198.83)	35.67** (14.05)	9265.32** (4319.89)	685.23* (390.54)	9661.22** (4317.45)	515.43* (253.50)
Observations	35,880	35,880	11,454	11,454	35,880	35,880	11,454	11,454
County FE	✓	✓	✓	✓	✓	✓	✓	✓
Day FE	✓	✓	✓	✓	✓	✓	✓	✓
Policy and EDI controls	✓	✓	✓	✓	✓	✓	✓	✓

Each column of each panel reports coefficients from a separate estimation of equation one, estimated separately within each decile of racial residential segregation. The dependent variable in each regression is denoted by the corresponding column title. *Controls* include county-level demographic characteristics (i.e. county area, percentage of males, average age, poverty, education, urban area, the percentage of immigrants, and share of Trump voters) and county-level health characteristics (i.e. the percentage of adults with obesity, in “poor health”, with diabetes, and who smoke). Standard errors are clustered at the state level. ***p < .001, ** p < .01, * p < .05.

TABLE A5—EMERGENCY DECLARATIONS, ETHNIC DIVERSITY, AND COVID-19 BY LEVEL OF BLACK/WHITE RACIAL SEGREGATION

	COVID outcomes in rates				COVID outcomes in level			
	Low B-W res. seg. (1)	(2)	High B-W res. seg. (3)	(4)	Low B-W res. seg. (5)	(6)	High B-W res. seg. (7)	(8)
Government policy: National Emergency Declaration								
Panel A: Covid-19 cases								
Post Federal emergency declaration	182.84*** (20.39)		182.24*** (23.29)		167.65*** (30.36)		702.13*** (217.46)	
EDI	205.82*** (64.85)		402.66*** (112.70)		459.11*** (116.56)		3649.95** (1370.23)	
Post Federal emergency declaration × EDI		326.45*** (102.91)		638.58*** (178.84)		727.80*** (184.74)		5788.31** (2174.24)
Observations	146,280	146,280	139,242	139,242	146,280	146,280	139,242	139,242
Panel B: Covid-19 deaths								
Post Federal emergency declaration	6.91*** (1.35)		8.33*** (1.53)		6.95*** (1.62)		41.42** (15.67)	
EDI	8.20** (3.44)		21.61*** (7.36)		17.05*** (4.87)		228.38*** (108.00)	
Post Federal emergency declaration × EDI		13.01** (5.46)		34.27*** (11.69)		27.01*** (7.71)		362.21*** (171.40)
Observations	146,280	146,280	139,242	139,242	146,280	146,280	139,242	139,242
Government policy: County Emergency Declaration								
Panel C: Covid-19 cases								
Post county emergency	187.01*** (39.07)	53.91 (120.06)	177.65*** (29.32)	-248.04*** (78.85)	294.79*** (55.55)	-871.28*** (273.38)	1030.25*** (287.40)	-3359.14*** (936.63)
EDI	69.38 (98.48)		310.03*** (105.31)		873.46*** (227.45)		4112.05*** (1261.37)	
Post county emergency × EDI		117.48 (173.86)		520.41*** (170.98)		1373.90*** (350.79)		6515.25*** (2054.52)
Observations	44,298	44,298	47,886	47,886	44,298	44,298	47,886	47,886
Panel D: Covid-19 deaths								
Post county emergency	6.89*** (2.18)	-2.49 (2.20)	8.10*** (1.53)	-11.73*** (4.31)	11.57*** (2.30)	-33.16*** (10.13)	50.00*** (14.73)	-161.34*** (49.72)
EDI	6.35 (3.99)		14.03** (5.46)		33.51*** (9.06)		192.63*** (67.71)	
Post county emergency × EDI		11.78 (6.99)		23.40** (8.81)		53.33*** (14.27)		304.91*** (109.98)
Observations	44,298	44,298	47,886	47,886	44,298	44,298	47,886	47,886
State FE	✓		✓		✓		✓	
County FE		✓		✓		✓		✓
Day FE	✓	✓	✓	✓	✓	✓	✓	✓
Controls	✓		✓		✓		✓	

Each column of each panel reports coefficients from a separate regression. The dependent variable in each regression is denoted by the corresponding panel title. High and low B-W res. seg. refer to counties with above- and below-median values of the Black/White racial residential segregation index, respectively. *Controls* include county-level demographic characteristics (i.e. county area, percentage of males, average age, poverty, education, urban area, the percentage of immigrants, and share of Trump voters) and county-level health characteristics (i.e. the percentage of adults with obesity, in “poor health”, with diabetes, and who smoke). Standard errors are clustered at the state level. ***p < .001, **p < .01, *p < .05.

TABLE A6—OTHER MOBILITY RESTRICTION POLICIES, ETHNIC DIVERSITY, AND COVID-19 OUTCOMES

	Covid outcomes in rates						Covid outcomes in level				
	All	Low W-NW res. seg.	High W-NW res. seg.	Low W-NW res. seg.	High W-NW res. seg.	Low W-NW res. seg.	High W-NW res. seg.	Low W-NW res. seg.	High W-NW res. seg.		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Government policy: National Stringency Index											
Panel A: Covid-19 cases											
Stringency index	2.16***			1.77***		2.93***		1.13***		8.98***	
	(0.23)			(0.23)		(0.34)		(0.15)		(2.81)	
EDI	245.32***	-55.02		182.06***		331.69***		193.63***		2518.99**	
	(55.46)	(85.70)		(44.91)		(83.55)		(47.06)		(955.71)	
Stringency index × EDI		6.63***	6.41***		4.76***		8.66***		5.06***		65.77**
		(1.50)	(1.45)		(1.17)		(2.18)		(1.23)		(24.96)
Observations	424,170	417,420	424,170	191,160	191,160	185,625	185,625	191,160	191,160	185,625	185,625
Panel B: Covid-19 deaths											
Stringency index	0.09***			0.07***		0.13***		0.04***		0.52**	
	(0.01)			(0.01)		(0.02)		(0.01)		(0.20)	
EDI	10.91***	-5.64		6.01***		16.70***		6.62***		152.51**	
	(3.32)	(4.47)		(2.19)		(5.45)		(1.65)		(72.61)	
Stringency index × EDI		0.29***	0.29***		0.16***		0.44***		0.17***		3.98**
		(0.09)	(0.09)		(0.06)		(0.14)		(0.04)		(1.90)
Observations	424,170	417,420	424,170	191,160	191,160	185,625	185,625	191,160	191,160	185,625	185,625
Government policy: County Safer-at-Home											
Panel C: Covid-19 cases											
Post county safer-at-home order	155.56***	-20.47	-24.46	134.54**	-25.22	177.87***	-4.75	282.71***	-189.94	1489.51***	-3337.49***
	(31.82)	(60.88)	(60.06)	(41.44)	(83.58)	(32.65)	(63.01)	(54.40)	(121.87)	(372.79)	(919.80)
EDI	9.08	126.85*		-1.81		-3.31		201.07		2765.83***	
	(57.33)	(62.84)		(90.35)		(62.11)		(120.21)		(526.83)	
Post county safer-at-home order × EDI		41.84	42.91		24.76		22.15		399.66		5128.87***
		(97.64)	(96.23)		(158.78)		(102.48)		(224.58)		(1034.22)
Observations	20,424	20,286	20,424	10,074	10,074	10,212	10,212	10,074	10,074	10,212	10,212
Panel D: Covid-19 deaths											
Post county safer-at-home order	5.09***	-1.28	-0.94	4.25***	-0.49	5.99***	-0.71	10.32***	-2.90	53.09***	-129.77**
	(1.13)	(2.56)	(2.51)	(1.24)	(2.59)	(1.41)	(4.02)	(2.96)	(5.31)	(16.65)	(44.12)
EDI	0.98	6.05		1.00		0.17		2.94		99.83***	
	(2.36)	(3.83)		(2.48)		(3.73)		(4.64)		(29.08)	
Post county safer-at-home order × EDI		2.61	2.48		2.34		1.27		6.41		184.63***
		(4.36)	(4.40)		(4.78)		(7.00)		(9.09)		(55.91)
Observations	20,424	20,286	20,424	10,074	10,074	10,212	10,212	10,074	10,074	10,212	10,212
Government policy: County Business Closure											
Panel C: Covid-19 cases											
Post county business closure	234.77***	-334.29***	-336.52***	165.20	-249.19*	310.15***	-462.45**	111.75	-113.10	3042.94**	-7461.37***
	(54.01)	(84.08)	(84.22)	(89.27)	(95.47)	(56.95)	(193.09)	(83.49)	(67.69)	(1143.31)	(1984.46)
EDI	430.10***	-90.64		424.40***		483.45***		231.99**		6415.42**	
	(119.04)	(113.72)		(34.55)		(200.31)		(69.06)		(1980.32)	
Post county business closure × EDI		809.25***	813.55***		772.05***		955.16**		416.08*		12165.55**
		(228.51)	(228.76)		(95.91)		(405.14)		(144.91)		(3757.46)
Observations	3,726	3,726	3,726	1,380	1,380	2,070	2,070	1,380	1,380	2,070	2,070
Panel D: Covid-19 deaths											
Post county business closure	11.01**	-18.50***	-18.21***	8.92	-19.68	13.92***	-22.50*	5.73	-8.55	134.01**	-347.51**
	(4.46)	(5.13)	(5.04)	(7.26)	(9.78)	(3.91)	(11.13)	(4.77)	(4.23)	(51.51)	(118.25)
EDI	22.70***	-6.33		36.18***		22.11*		14.56***		311.03**	
	(6.40)	(7.80)		(6.19)		(10.04)		(2.41)		(110.99)	
Post county business closure × EDI		42.83***	42.83***		66.25**		43.84*		26.17**		592.77**
		(12.01)	(11.97)		(12.63)		(19.76)		(5.65)		(212.71)
Observations	3,726	3,726	3,726	1,380	1,380	2,070	2,070	1,380	1,380	2,070	2,070
State FE		✓									
County FE			✓		✓		✓		✓		✓
Day FE		✓			✓		✓		✓		✓
Controls		✓			✓		✓		✓		✓

Each column of each panel reports coefficients from a separate regression. The dependent variable in each regression is denoted by the corresponding panel title. High and low W-NW res. seg. refer to counties with above- and below-median values of the White/non-White racial residential segregation index, respectively. Controls include county-level demographic characteristics (i.e. county area, percentage of males, average age, poverty, education, urban area, the percentage of immigrants, and share of Trump voters) and county-level health characteristics (i.e. the percentage of adults with obesity, in "poor health", with diabetes, and who smoke). Standard errors are clustered at the state level. ** *p < .001, * *p < .01, *p < .05.

TABLE A7—OTHER MOBILITY RESTRICTION POLICIES, ETHNIC DIVERSITY, AND COVID-19 BY LEVEL OF BLACK/WHITE RACIAL SEGREGATION

	COVID outcomes in rates				COVID outcomes in level			
	Low B-W res. seg. (1)	High B-W res. seg. (2)	High B-W res. seg. (3)	High B-W res. seg. (4)	Low B-W res. seg. (5)	High B-W res. seg. (6)	High B-W res. seg. (7)	High B-W res. seg. (8)
Government policy: National Stringency Index								
Panel A: Covid-19 cases								
Stringency index	2.80*** (0.32)		2.82*** (0.37)		2.59*** (0.47)		10.98*** (3.45)	
EDI	189.56*** (61.10)		380.70*** (108.65)		429.12*** (109.34)		3477.16** (1322.56)	
Stringency index × EDI		4.95*** (1.60)		9.94*** (2.84)		11.20*** (2.85)		90.79** (34.55)
Observations	143,100	143,100	136,215	136,215	143,100	143,100	136,215	136,215
Panel B: Covid-19 deaths								
Stringency index	0.11*** (0.02)		0.13*** (0.02)		0.11*** (0.03)		0.65** (0.25)	
EDI	7.68** (3.26)		20.47*** (7.04)		15.97*** (4.57)		216.85*** (103.50)	
Stringency index × EDI		0.20** (0.09)		0.53*** (0.18)		0.42*** (0.12)		5.66** (2.71)
Observations	143,100	143,100	136,215	136,215	143,100	143,100	136,215	136,215
Government policy: County Safer-at-Home								
Panel C: Covid-19 cases								
Post county safer-at-home order	120.30*** (20.94)	5.98 (47.52)	167.70*** (35.38)	-92.45 (74.11)	421.28*** (49.51)	-806.02*** (215.05)	1679.26*** (294.95)	-3826.41*** (695.74)
EDI	-5.54 (43.78)		103.72 (71.19)		746.47*** (180.65)		3681.56*** (585.24)	
Post county safer-at-home order × EDI		7.96 (73.39)		227.64* (123.25)		1343.75*** (325.25)		6892.65*** (1105.17)
Observations	10,764	10,764	7,866	7,866	10,764	10,764	7,866	7,866
Panel D: Covid-19 deaths								
Post county safer-at-home order	4.42*** (1.11)	-0.41 (3.03)	5.20*** (1.29)	-5.23** (2.32)	15.12*** (2.94)	-26.75*** (8.13)	60.31*** (12.76)	-145.82*** (33.25)
EDI	0.64 (3.18)		5.64** (1.97)		23.56*** (7.55)		130.86*** (29.46)	
Post county safer-at-home order × EDI		1.60 (5.72)		11.55*** (3.71)		42.40*** (13.81)		243.84*** (54.59)
Observations	10,764	10,764	7,866	7,866	10,764	10,764	7,866	7,866
Government policy: County Business Closure								
Panel C: Covid-19 cases								
Post county business closure	284.07 (51.10)	248.89 (317.29)	262.30** (74.41)	-357.69** (122.16)	747.15 (827.18)	-4494.71 (6085.53)	3470.71** (1164.69)	-5683.93** (2048.81)
EDI	-217.00 (300.90)		466.46** (160.31)		3908.78 (4590.53)		6507.50** (1810.98)	
Post county business closure × EDI		-293.10 (538.01)		841.21** (309.05)		6629.39 (9094.36)		11640.66** (3559.88)
Observations	966	966	1,656	1,656	966	966	1,656	1,656
Panel D: Covid-19 deaths								
Post county business closure	19.45 (4.59)	17.24 (33.28)	11.98** (4.10)	-18.40** (7.01)	29.84 (27.64)	-149.35 (208.75)	156.24** (53.05)	-259.26** (102.90)
EDI	-15.50 (29.34)		24.40** (8.90)		123.74 (157.48)		313.59** (104.82)	
Post county business closure × EDI		-19.94 (53.92)		44.29** (17.00)		211.30 (313.99)		565.05** (201.32)
Observations	966	966	1,656	1,656	966	966	1,656	1,656
State FE	✓		✓		✓		✓	
County FE		✓		✓		✓		✓
Day FE	✓	✓	✓	✓	✓	✓	✓	✓
Controls	✓		✓		✓		✓	

Each column of each panel reports coefficients from a separate regression. The dependent variable in each regression is denoted by the corresponding panel title. High and low B-W res. seg. refer to counties with above- and below-median values of the Black/White racial residential segregation index, respectively. *Controls* include county-level demographic characteristics (i.e. county area, percentage of males, average age, poverty, education, urban area, the percentage of immigrants, and share of Trump voters) and county-level health characteristics (i.e. the percentage of adults with obesity, in “poor health”, with diabetes, and who smoke). Standard errors are clustered at the state level. ** *p < .001, * *p < .01, *p < .05.